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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,979	08/22/2000	Palani Raj K. Wallajapet	KCX-274(15145)	1403
22827	7590	06/04/2004	EXAMINER	
DORITY & MANNING, P.A.			HALPERN, MARK	
POST OFFICE BOX 1449			ART UNIT	PAPER NUMBER
GREENVILLE, SC 29602-1449			1731	

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/643,979	WALLAJAPET ET AL.	
Examiner	Art Unit	
Mark Halpern	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 70-99 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 70-99 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) Acknowledgement is made of Amendment received 3/25/2004. Applicants cancel claims 36-40, 42-63, 65-69, and offer new claims 70-99, for consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 2) Claims 70-71, 75-89, are rejected under 35 U.S.C. 102(b) as being anticipated by Mackey (4,986,882).

Claims 70, 79-80, 88-89: Mackey discloses a process of making a highly absorbent tissue by wet-laying pulps comprising particular polycarbonate polymer-modified fibrous pulps such as mildly hydrolyzed methyl acrylate-grafted softwood kraft pulps (Abstract). The polymer-modified fibrous pulps designated as type A pulps, are highly absorbent materials (col. 8, lines 14-15), and are added during the wet stage in amount of 1% to about 20% by weight (col. 6, lines 1-15). The swelling capacity of the type A pulps is at least 20 grams of aqueous fluid per gram of pulp (col. 16, lines 20-35). The total swelling capacity of tissue product is up to 4 fold (col. 14, lines 60-62), which reads on 400 grams per gram of absorbent material. The tissue web formed is dried

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(col. 5, lines 25-49). The tissue formed, as disclosed in Examples 1-3 (Tables, cols. 27-28), is of basis weight less than 100 grams per square meter.

Claim 71: the highly absorbent type A fibrous material is provided in dry form (col. 18, line 58).

Claim 75: the total swelling capacity of tissue product is up to 4 fold (col. 14, lines 60-62), which reads on 400 grams per gram of absorbent material.

Claim 76: application of wet-strength resins is disclosed (col. 12, lines 1-9).

Claims 77-78, 84-86: drying to moisture content claimed is disclosed, through-air-drying is disclosed (col. 26, lines 39-61).

Claim 81: hydrogels are disclosed (col. 15, lines 53-60).

Claims 82-83: as disclosed above, type A pulps are made of fibrous fibers.

Claim 87: multi-ply towels are disclosed (col. 22, lines 52-64).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 72-74, 90-99, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackey in view of Nguyen (5,175,046).

Claims 72-74, 90-92: Mackey is applied as above for claims 70, 88, Mackey fails to disclose that the superabsorbent material is pre-swelled. Nguyen discloses adding a

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polymeric superabsorbent material to a fibrous structure wherein the superabsorbent material is pre-swelled. The pre-swelled material over 50 percent of its total swelling capacity (Nguyen, col. 4, lines 14-51). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teaching of Mackey and Nguyen, because such a combination would increase porosity in the tissue of In Mackey as disclosed by Nguyen (col. 4, lines 33-37).

Claims 93, 97, 99: Mackey discloses a process of making a highly absorbent tissue by wet-laying pulps comprising particular polycarbonate polymer-modified fibrous pulps such as mildly hydrolyzed methyl acrylate-grafted softwood kraft pulps (Abstract). The polymer-modified fibrous pulps designated as type A pulps, are highly absorbent materials (col. 8, lines 14-15), and are added during the wet stage in amount of 1% to about 20% by weight (col. 6, lines 1-15). The swelling capacity of the type A pulps is at least 20 grams of aqueous fluid per gram of pulp (col. 16, lines 20-35). The total swelling capacity of tissue product is up to 4 fold (col. 14, lines 60-62), which reads on 400 grams per gram of absorbent material. The tissue web formed is dried (col. 5, lines 25-49). The tissue formed, as disclosed in Examples 1-3 (Tables, cols. 27-28), is of basis weight less than 100 grams per square meter. Mackey fails to disclose that the superabsorbent material is pre-swelled. Nguyen discloses adding a polymeric superabsorbent material to a fibrous structure wherein the superabsorbent material is pre-swelled. The pre-swelled material over 50 percent of its total swelling capacity (Nguyen, col. 4, lines 14-51). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teaching of Mackey and Nguyen,

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because such a combination would increase porosity in the tissue of In Mackey as disclosed by Nguyen (col. 4, lines 33-37).

Claims 94-95: the highly absorbent type A fibrous material is provided in dry form (Mackey, col. 18, line 58).

Claim 96: multi-ply towels are disclosed (Mackey, col. 22, lines 52-64).

Claims 98: towel through-air-drying is disclosed (Mackey, col. 26, lines 39-61).

Response to Amendment

4) Claims 36-40, 42-63, 65, 67-69, rejection under 35 U.S.C. 103(a) as being unpatentable over Anderson (5,651,862), is withdrawn in view of cancelled claims.

5) Claim 66 rejection under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Nielsen (6,416,624) is withdrawn in view of cancelled claim.

6) Applicant's arguments with respect to claims 36-40, 42-63, 65-69, have been considered but are moot in view of cancelled claims.

Conclusion

7) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1700.

M. H.

Mark Halpern
Patent Examiner
Art Unit 1731



PETER CHIN
PRIMARY EXAMINER